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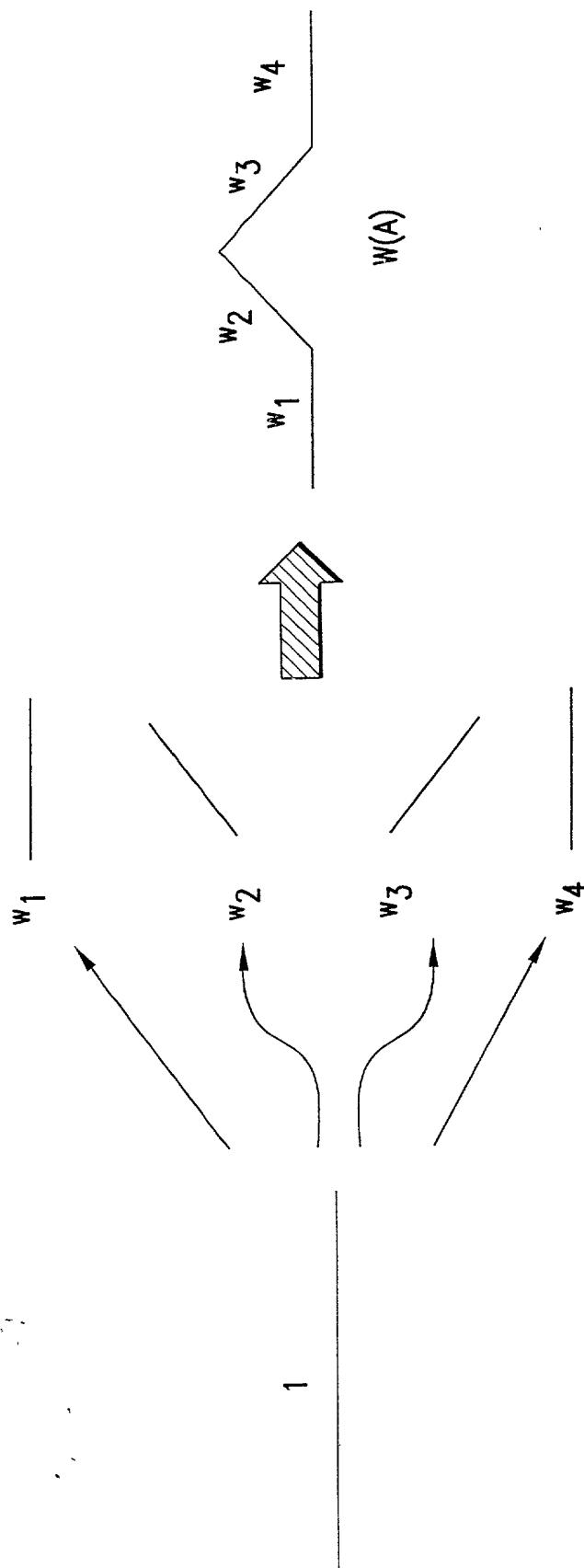


FIG. 1

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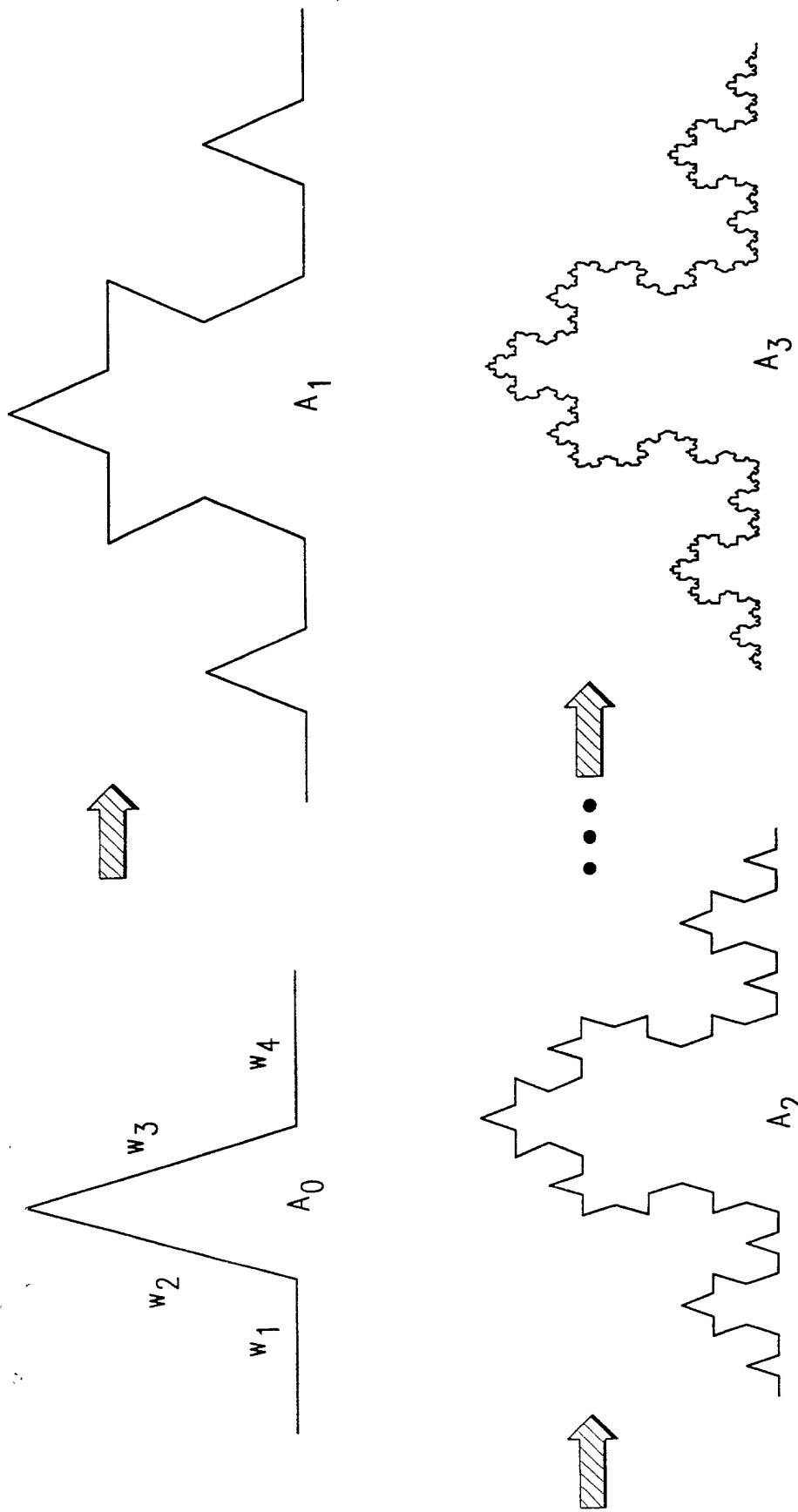


FIG. 2

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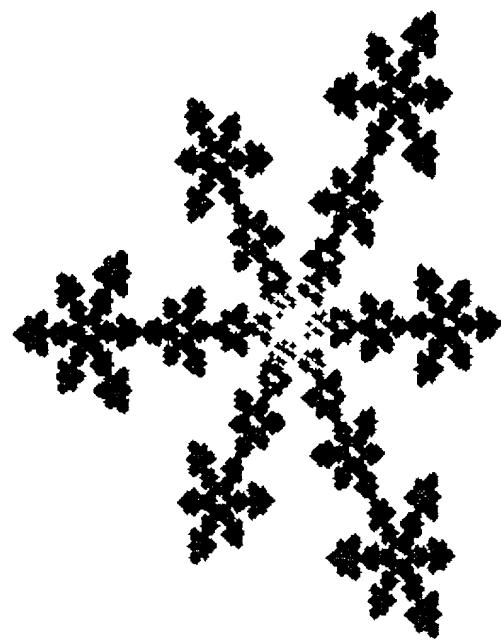


FIG.3A

FIG.3

a	b	c	d	e	f
0.255	0.0	0.0	0.255	0.3726	0.6714
0.255	0.0	0.0	0.255	0.1146	0.2232
0.255	0.0	0.0	0.255	0.6306	0.2232
0.370	-0.642	0.642	0.370	0.6356	-0.0061

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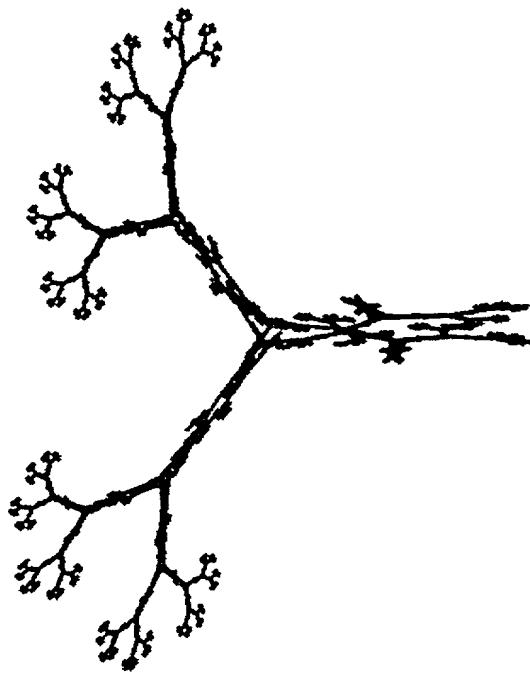


FIG. 4A

a	0.195	-0.488	0.344	0.443	0.4431	0.2452
b	0.462	0.414	-0.252	0.361	0.2511	0.5692
c	-0.058	-0.07	0.453	-0.111	0.5976	0.0969
d	-0.035	0.07	-0.469	-0.022	0.4884	0.5069
e	-0.637	0.0	0.0	0.501	0.8562	0.2513
f						

FIG. 4

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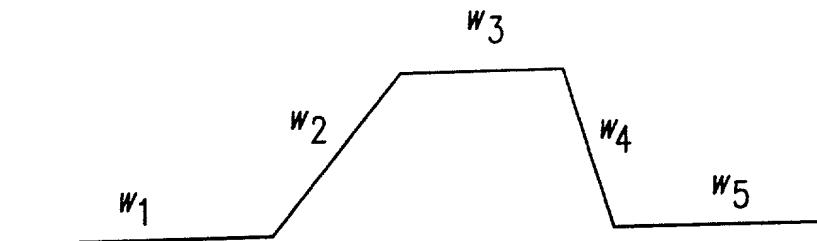


FIG.5

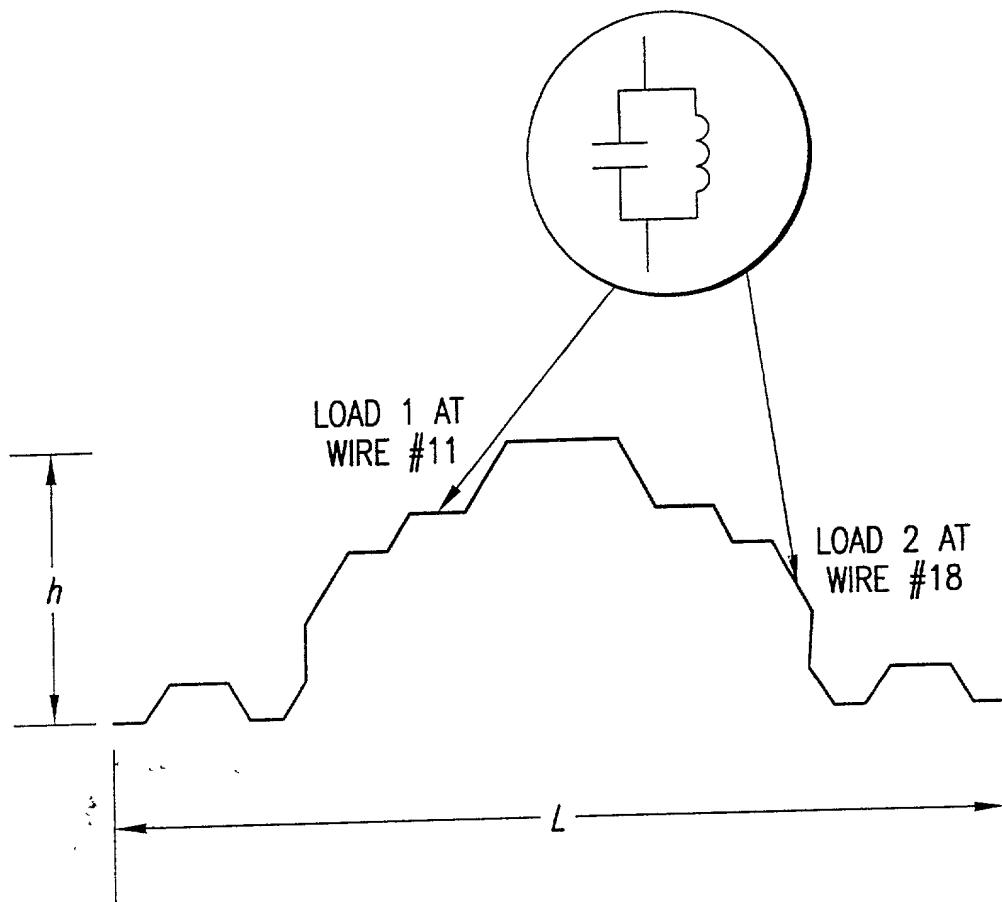


FIG.6

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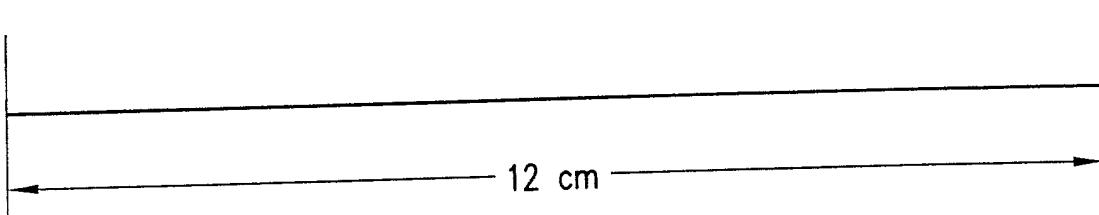


FIG.7

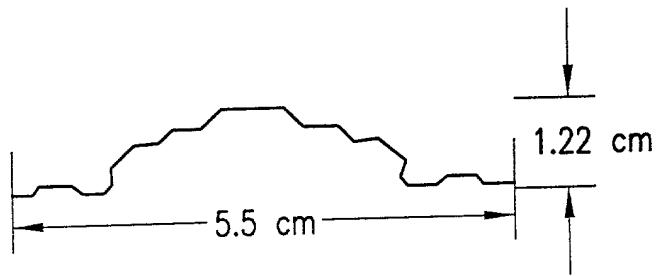


FIG.8

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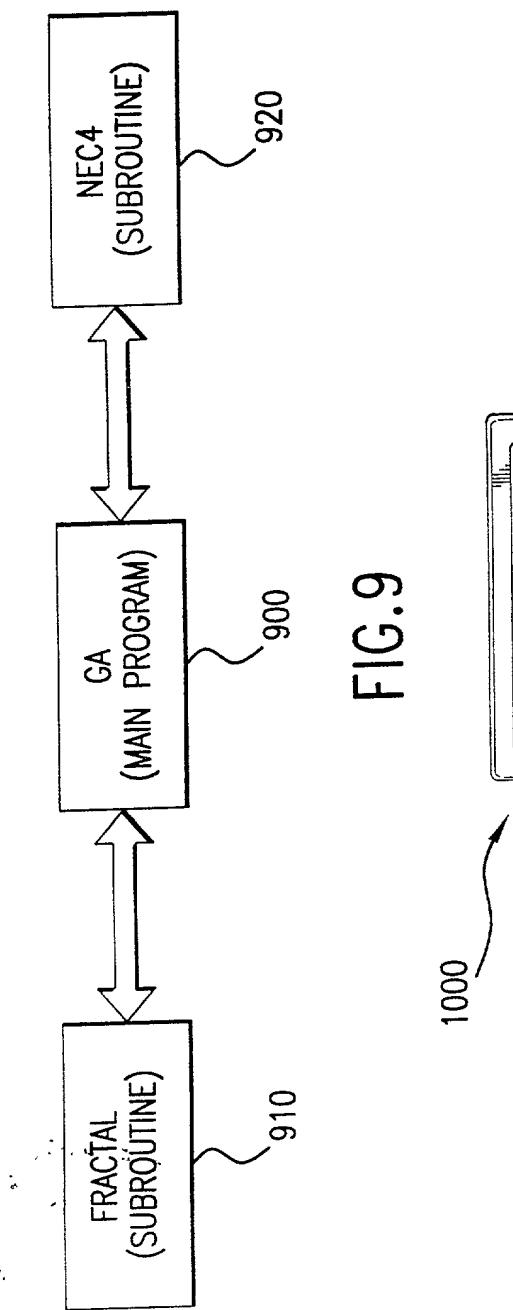


FIG.9

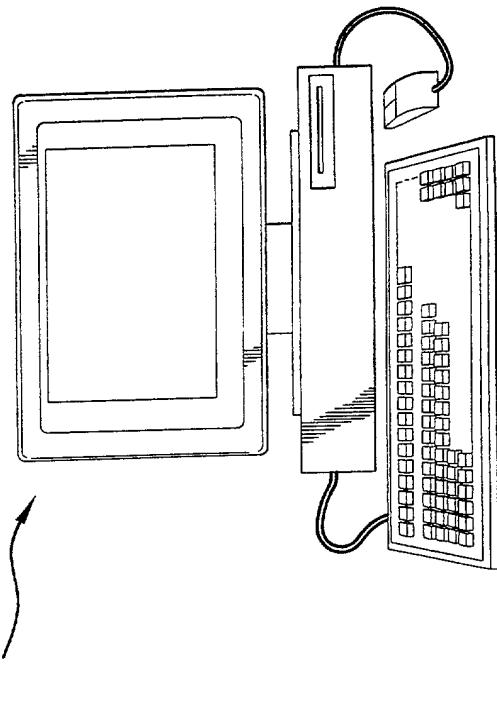


FIG.10

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LENGTH OF ANTENNA = 12 cm
LOAD LOCATIONS : LOAD1 ELEMENT 21 L1 = 15.81250 nH C1 = 0.4849 pF
LOAD2 ELEMENT 06 L2 = 17.98438 nH C2 = 0.7996 pF

FREQUENCY	VSWR
1225 MHz	1.3383
1575 MHz	1.2872

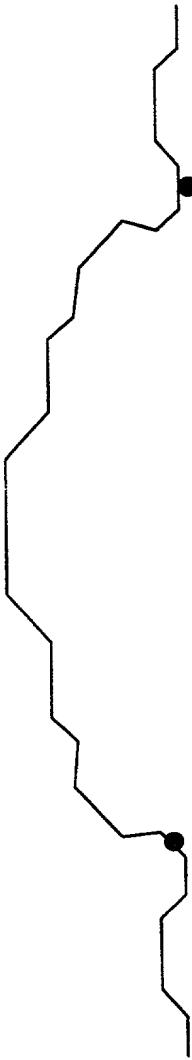


FIG. 11

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LENGTH OF ANTENNA = 11.5 cm
LOAD LOCATIONS : LOAD1 ELEMENT 21 $L_1 = 15.53125 \text{ nH}$ $C_1 = 0.5376 \text{ pF}$
LOAD2 ELEMENT 06 $L_2 = 17.95312 \text{ nH}$ $C_2 = 0.8453 \text{ pF}$

FREQUENCY	VSWR
1225 MHz	1.2649
1575 MHz	1.2266

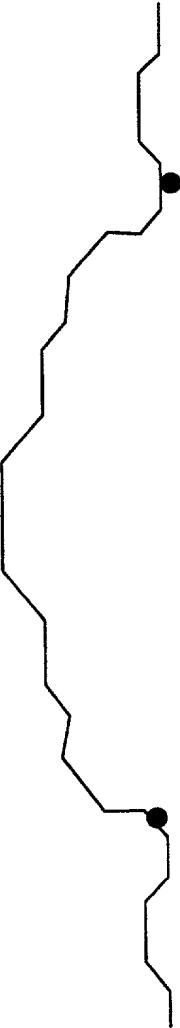


FIG. 12

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LENGTH OF ANTENNA = 11.0 cm
LOAD LOCATIONS : LOAD1 ELEMENT 05 L1 = 17.26562 nH C1 = 0.4708 pF
LOAD2 ELEMENT 04 L2 = 17.89062 nH C2 = 0.9648 pF

FREQUENCY	VSWR
1225 MHz	1.0738
1575 MHz	1.3285

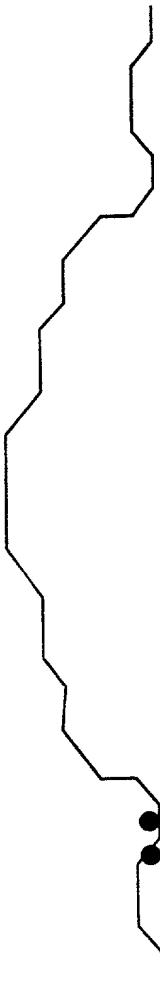


FIG. 13

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LENGTH OF ANTENNA = 10.5 cm
LOAD LOCATIONS : LOAD1 ELEMENT 22 $L_1 = 13.93750$ nH $C_1 = 0.6414$ pF
LOAD2 ELEMENT 04 $L_2 = 18.92188$ nH $C_2 = 0.9050$ pF

FREQUENCY	VSWR
1225 MHz	1.1249
1575 MHz	1.1205

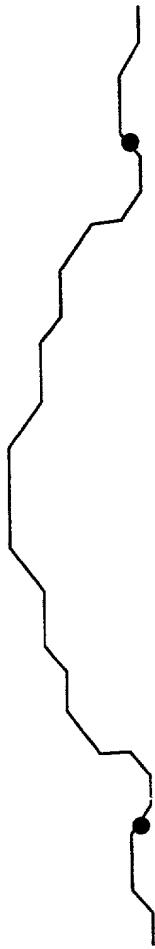


FIG. 14

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LENGTH OF ANTENNA = 10.0 cm
LOAD LOCATIONS : LOAD1 ELEMENT 25 L1 = 15.98438 nH C1 = 0.5746 pF
LOAD2 ELEMENT 23 L2 = 13.39062 nH C2 = 0.6712 pF

FREQUENCY	VSWR
1225 MHz	1.1884
1575 MHz	1.1103



FIG. 15

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LENGTH OF ANTENNA = 9.5 cm
LOAD LOCATIONS : LOAD1 ELEMENT 22 L1 = 13.48438 nH C1 = 0.6941 pF
LOAD2 ELEMENT 25 L2 = 12.09375 nH C2 = 0.1509 pF

FREQUENCY	VSWR
1225 MHz	1.0386
1575 MHz	1.1186

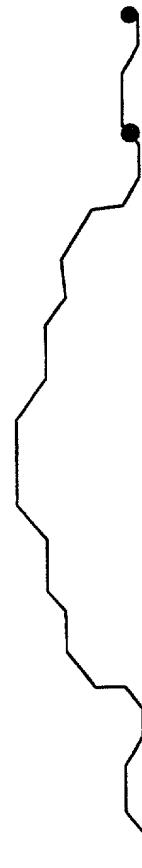


FIG. 16

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LENGTH OF ANTENNA = 9.0 cm
LOAD LOCATIONS : LOAD1 ELEMENT 25 L1 = 12.04688 nH C1 = 0.3302 pF
 LOAD2 ELEMENT 05 L2 = 15.43750 nH C2 = 0.6642 pF

FREQUENCY	VSWR
1225 MHz	1.0392
1575 MHz	1.1430

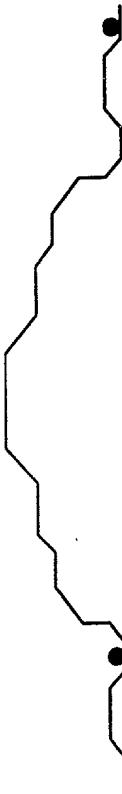


FIG. 17

LENGTH OF ANTENNA = 8.5 cm
LOAD LOCATIONS : LOAD1 ELEMENT 25 L1 = 18.79688 nH C1 = 0.5570 pF
LOAD2 ELEMENT 09 L2 = 15.43750 nH C2 = 0.6853 pF

FREQUENCY	VSWR
1225 MHz	1.1235
1575 MHz	1.0224

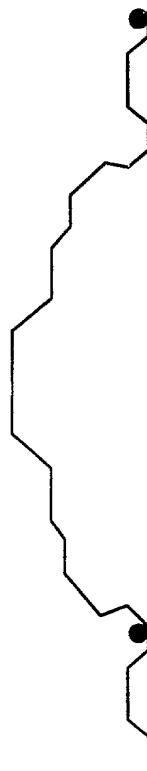


FIG. 18

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LENGTH OF ANTENNA = 8.0 cm
LOAD LOCATIONS : LOAD1 ELEMENT 04 L1 = 13.42188 nH C1 = 0.1457 pF
LOAD2 ELEMENT 04 L2 = 16.15625 nH C2 = 0.7644 pF

FREQUENCY	VSWR
1225 MHz	1.1432
1575 MHz	1.0470



FIG. 19

LENGTH OF ANTENNA = 7.5 cm
LOAD LOCATIONS : LOAD1 ELEMENT 04 L1 = 13.50000 nH C1 = 0.3671 pF
LOAD2 ELEMENT 25 L2 = 18.35938 nH C2 = 0.8910 pF

FREQUENCY	VSWR
1225 MHz	1.0453
1575 MHz	1.1628



FIG.20

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LENGTH OF ANTENNA = 7.0 cm
LOAD LOCATIONS : LOAD1 ELEMENT 23 L1 = 17.95312 nH C1 = 0.8119 pF
LOAD2 ELEMENT 19 L2 = 19.50000 nH C2 = 0.1017 pF

FREQUENCY	VSWR
1225 MHz	1.3338
1575 MHz	1.1024

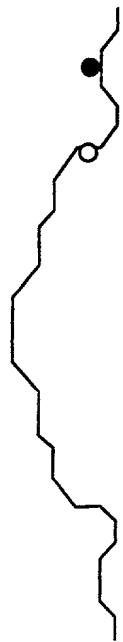


FIG. 21

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LENGTH OF ANTENNA = 6.5 cm
LOAD LOCATIONS : LOAD1 ELEMENT 22 L1 = 16.10938 nH C1 = 0.8962 pF
LOAD2 ELEMENT 12 L2 = 13.01562 nH C2 = 0.2107 pF

FREQUENCY	VSWR
1225 MHz	1.6677
1575 MHz	1.4982



FIG. 22

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LENGTH OF ANTENNA = 6.0 cm
LOAD LOCATIONS : LOAD1 ELEMENT 22 L1 = 16.35938 nH C1 = 0.8962 pF
LOAD2 ELEMENT 09 L2 = 16.12500 nH C2 = 0.3214 pF

FREQUENCY	VSWR
1225 MHz	1.6956
1575 MHz	1.4979

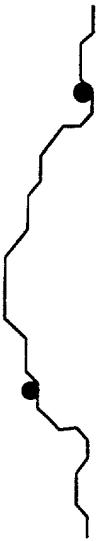


FIG. 23

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LENGTH OF ANTENNA = 5.5 cm
LOAD LOCATIONS : LOAD1 ELEMENT 22 L1 = 15.86914 nH C1 = 0.9308 pF
LOAD2 ELEMENT 16 L2 = 12.51172 nH C2 = 0.5371 pF

FREQUENCY	VSWR
1225 MHz	1.9413
1575 MHz	1.7861

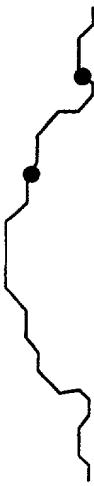


FIG. 24

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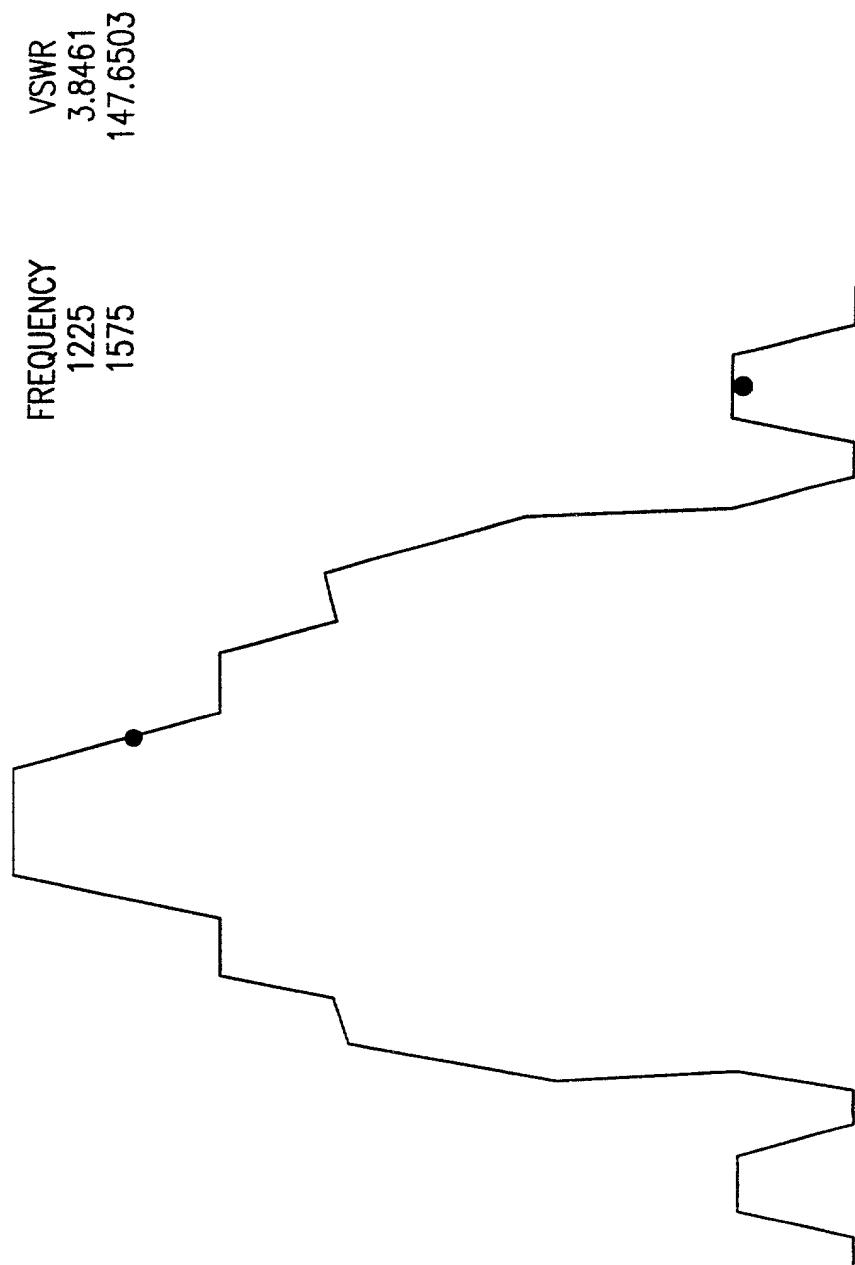


FIG.25

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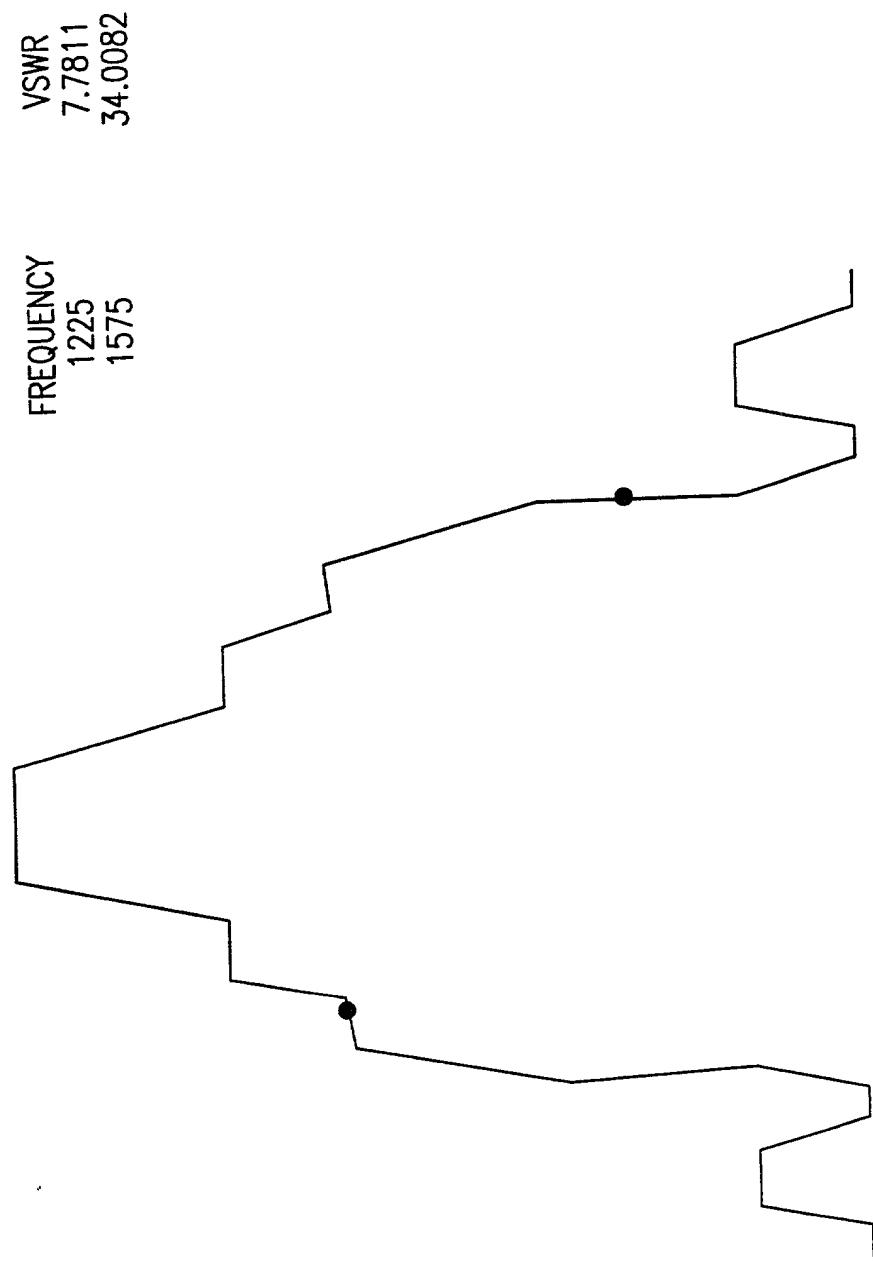


FIG. 26

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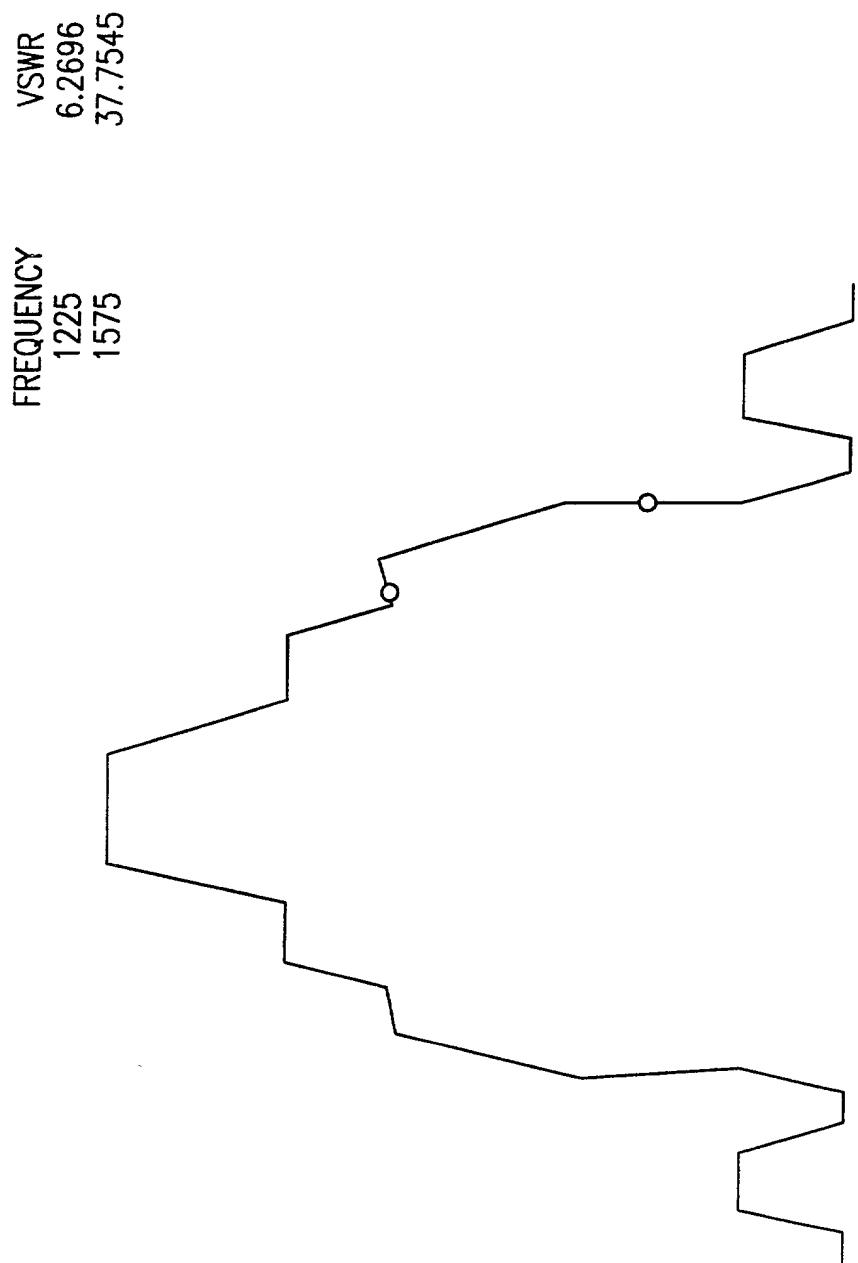


FIG.27

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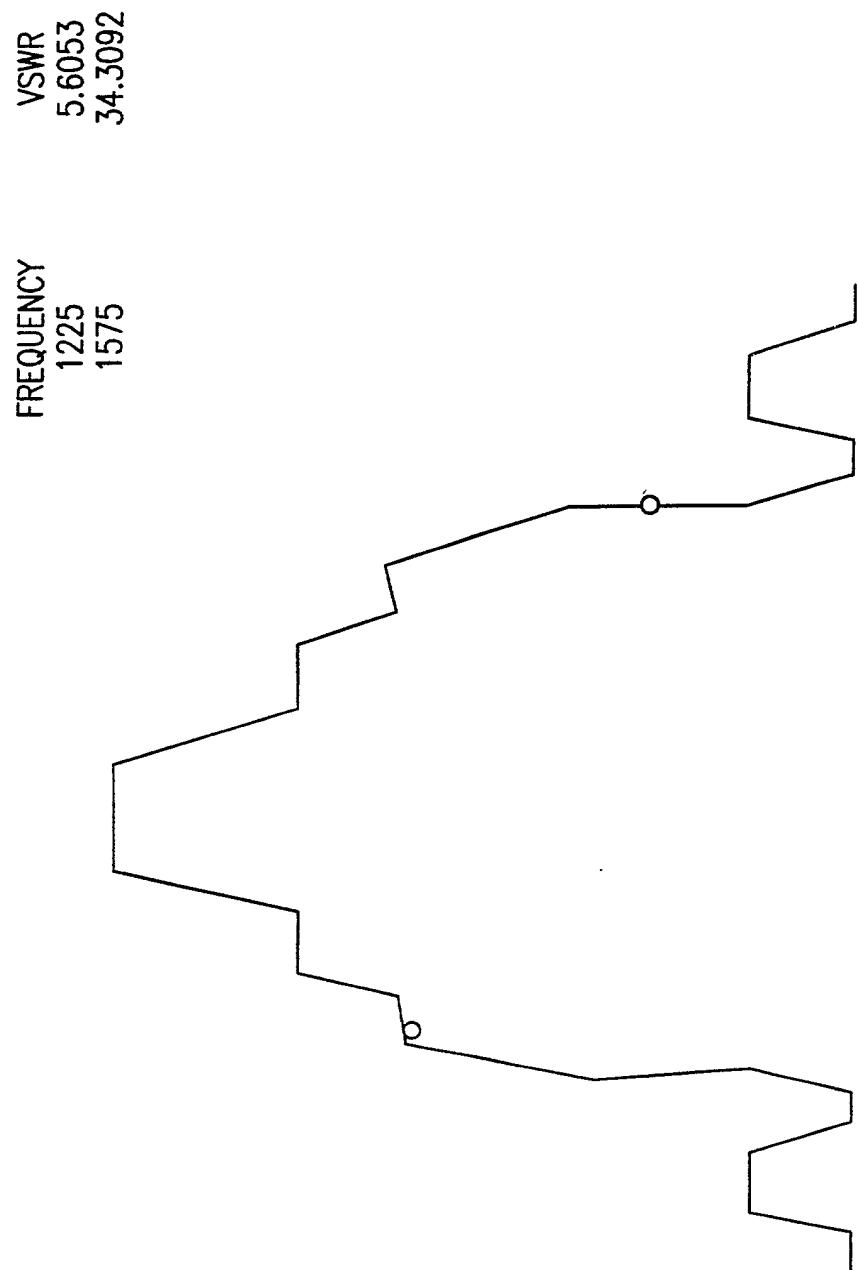


FIG.28

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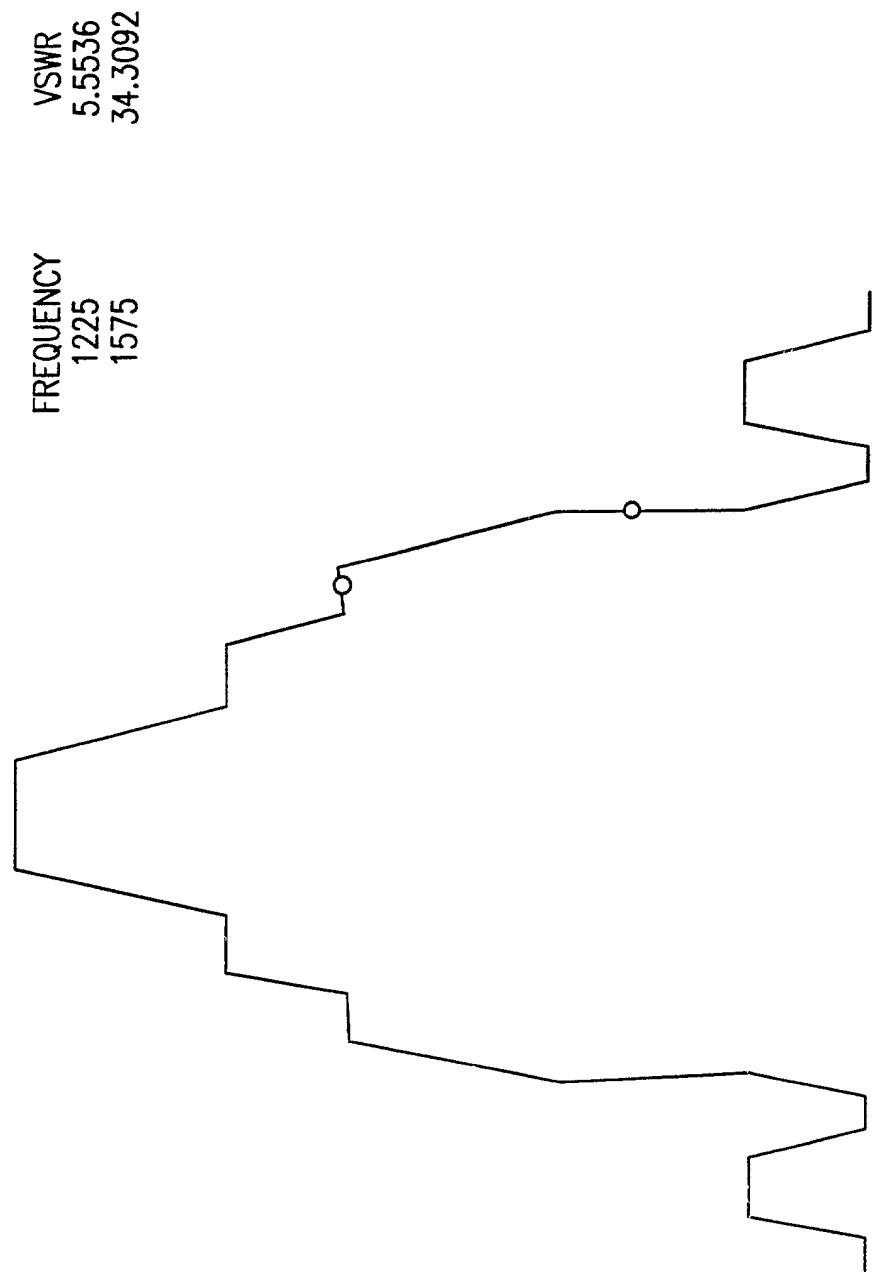


FIG.29

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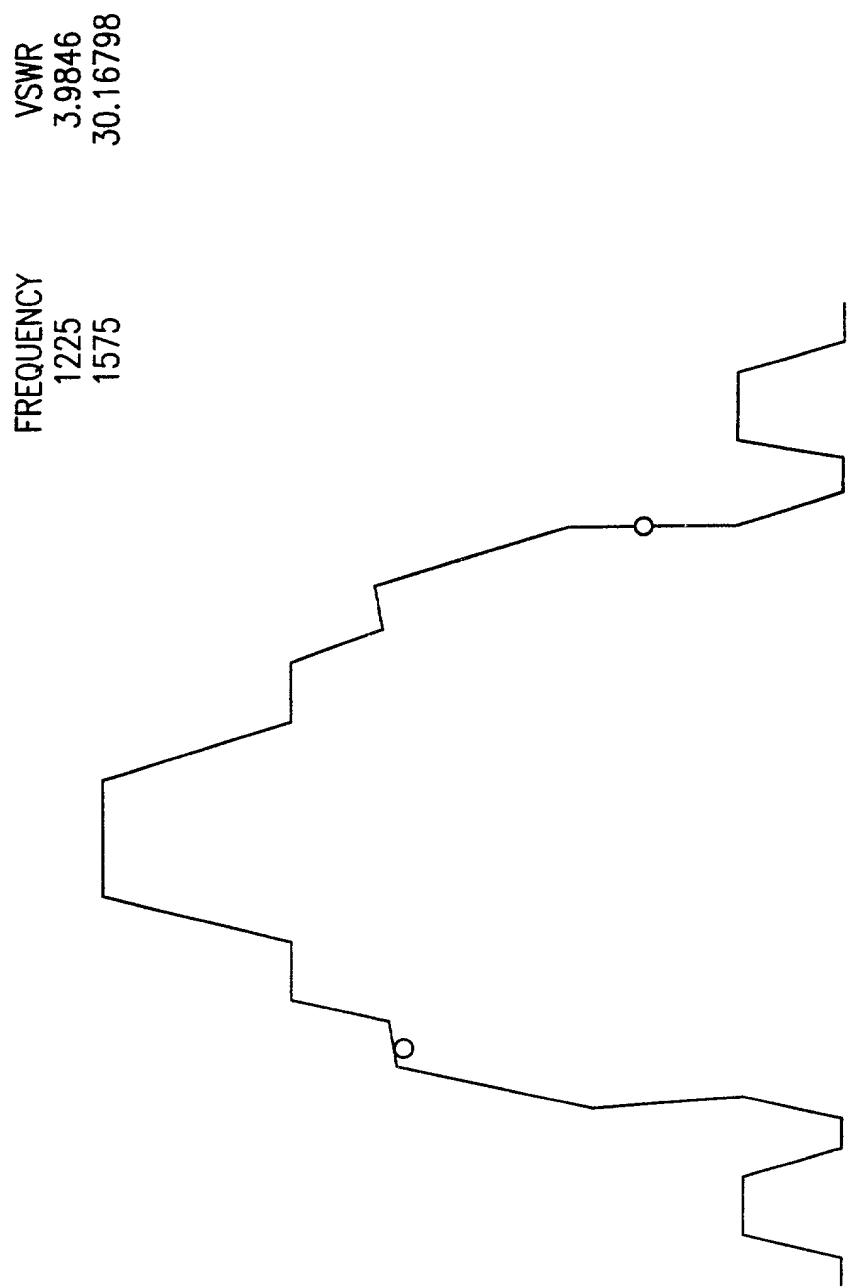


FIG. 30

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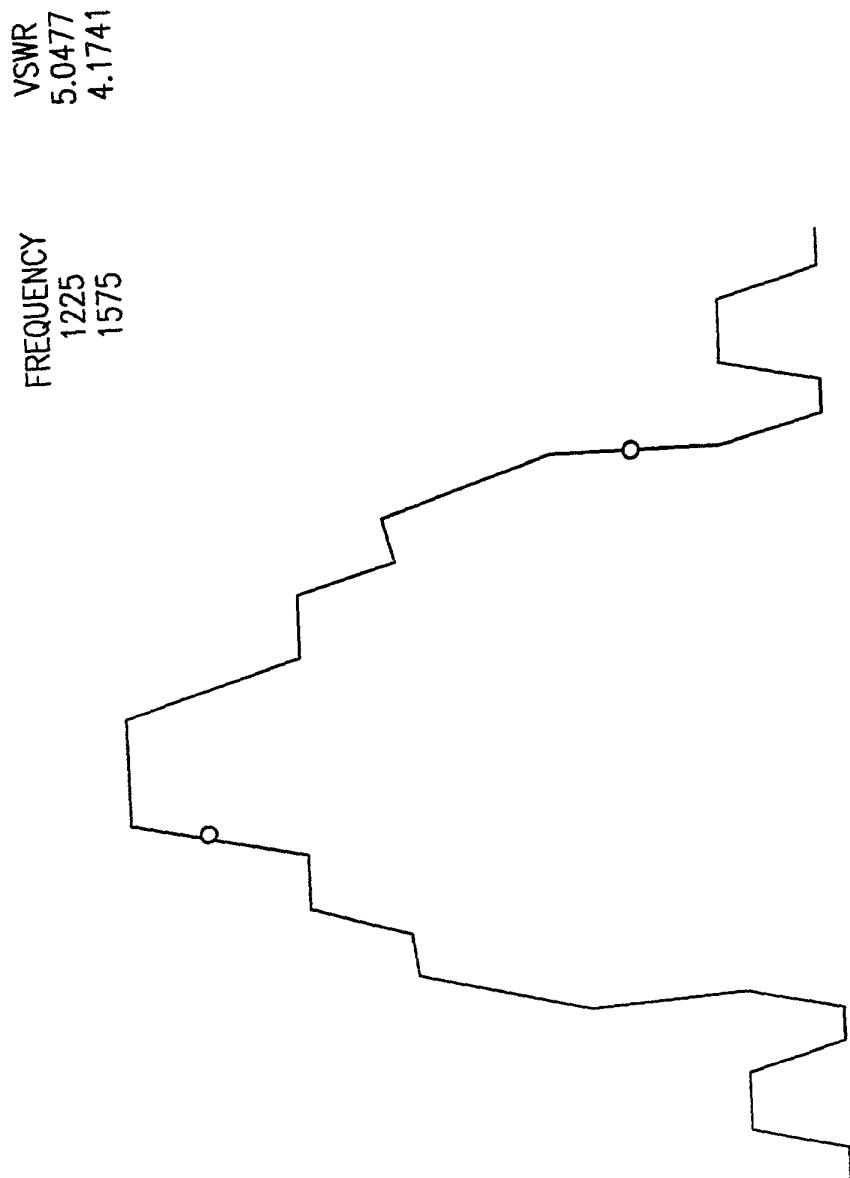


FIG.31

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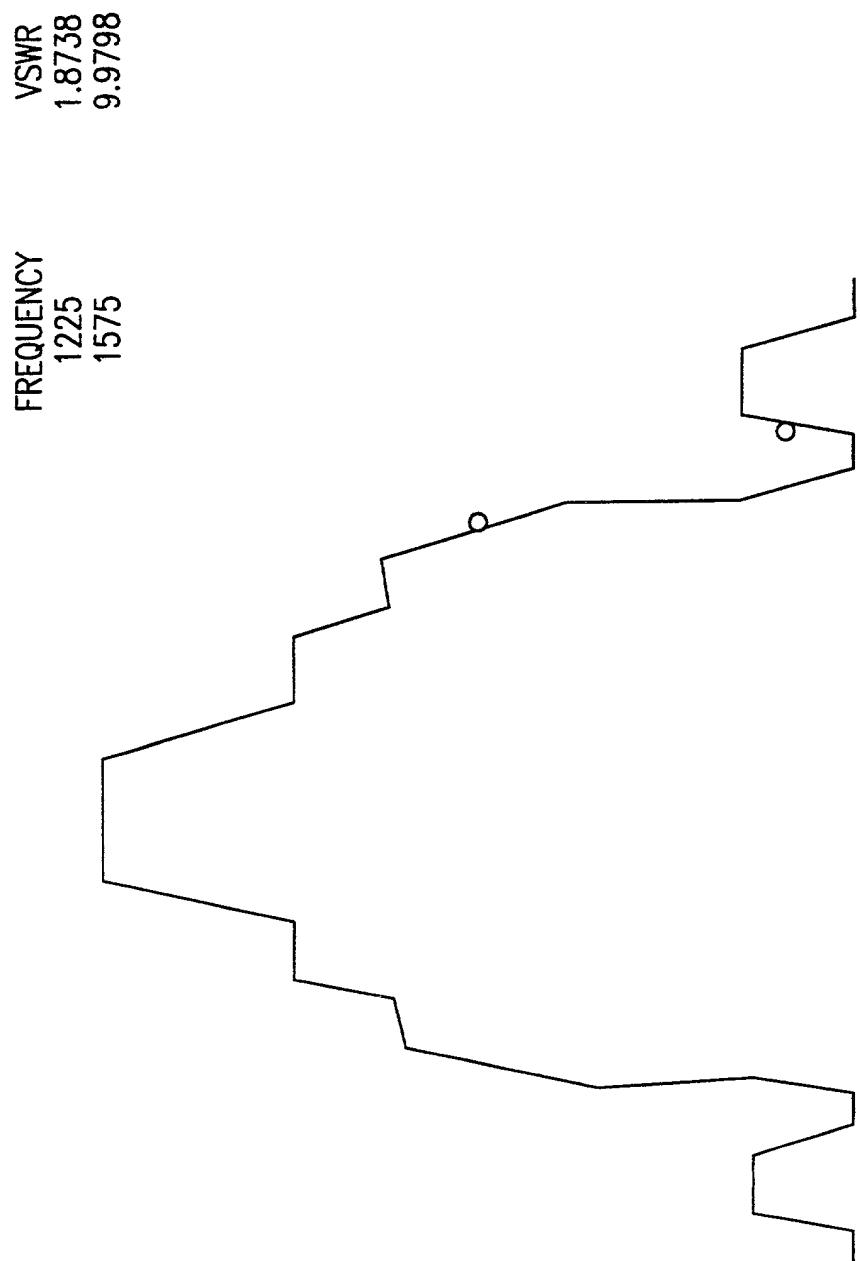


FIG.32

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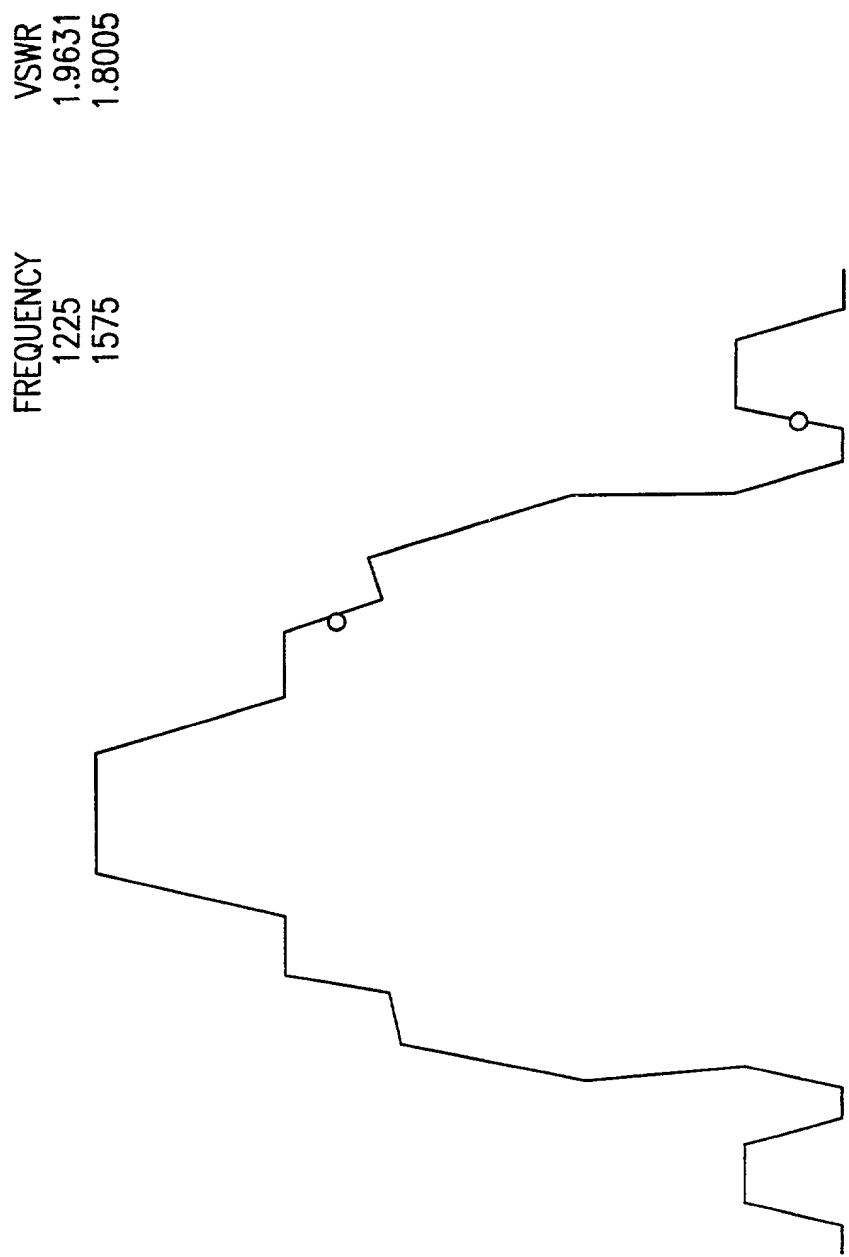


FIG.33

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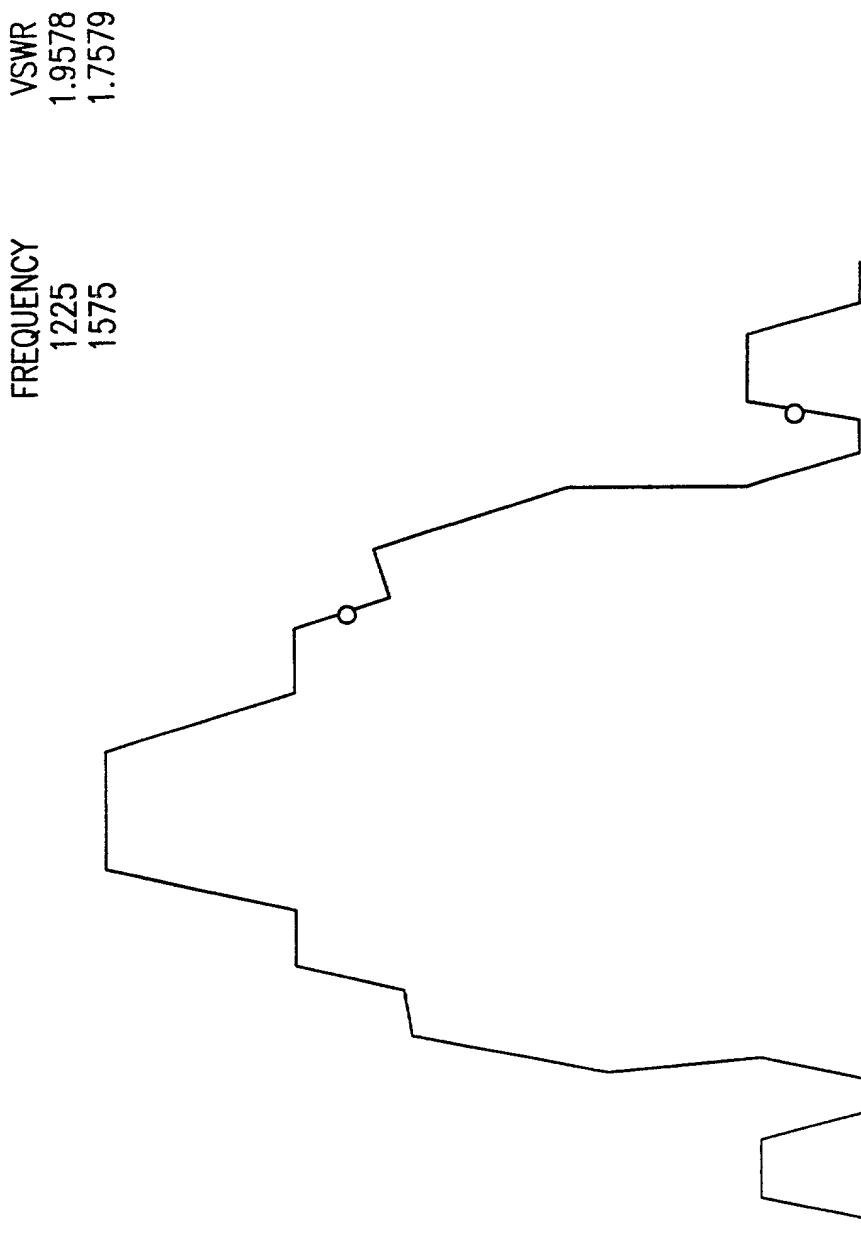


FIG. 34

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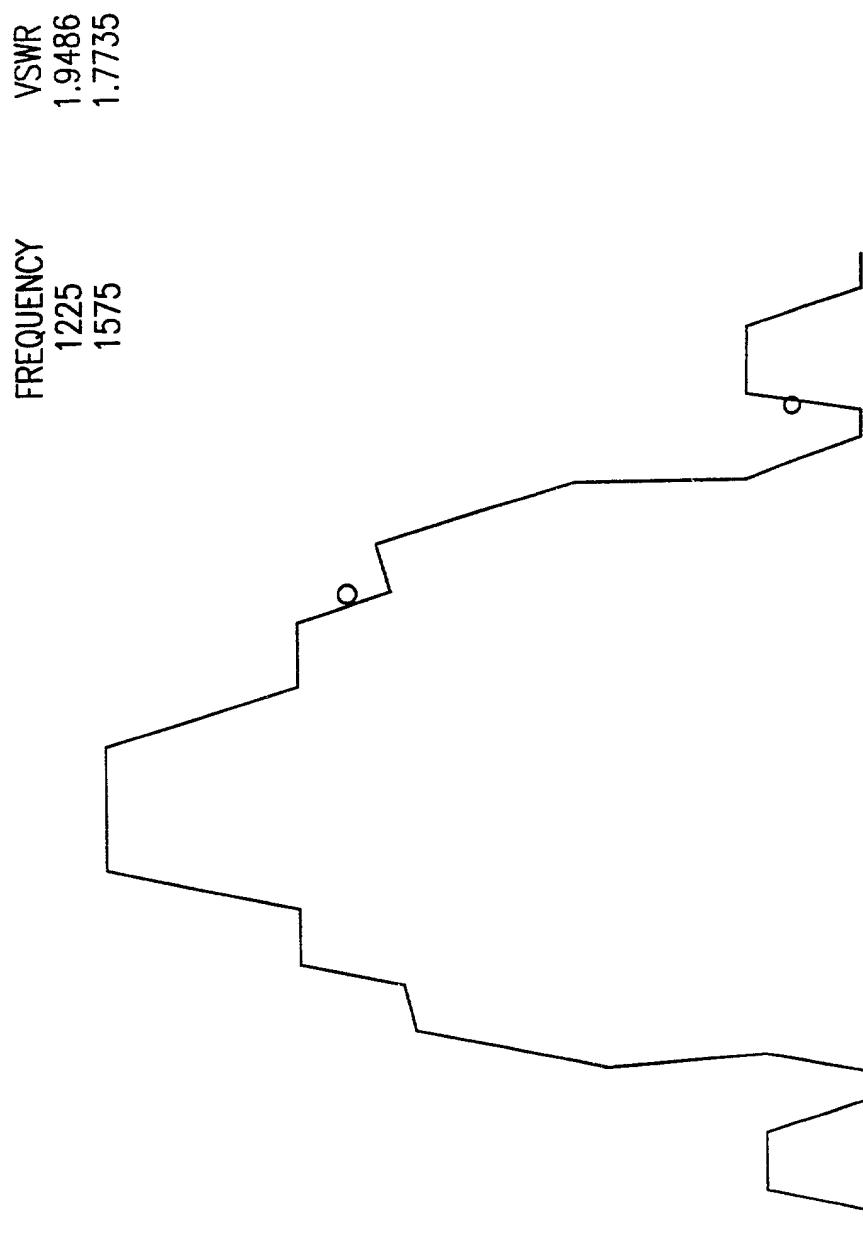


FIG. 35

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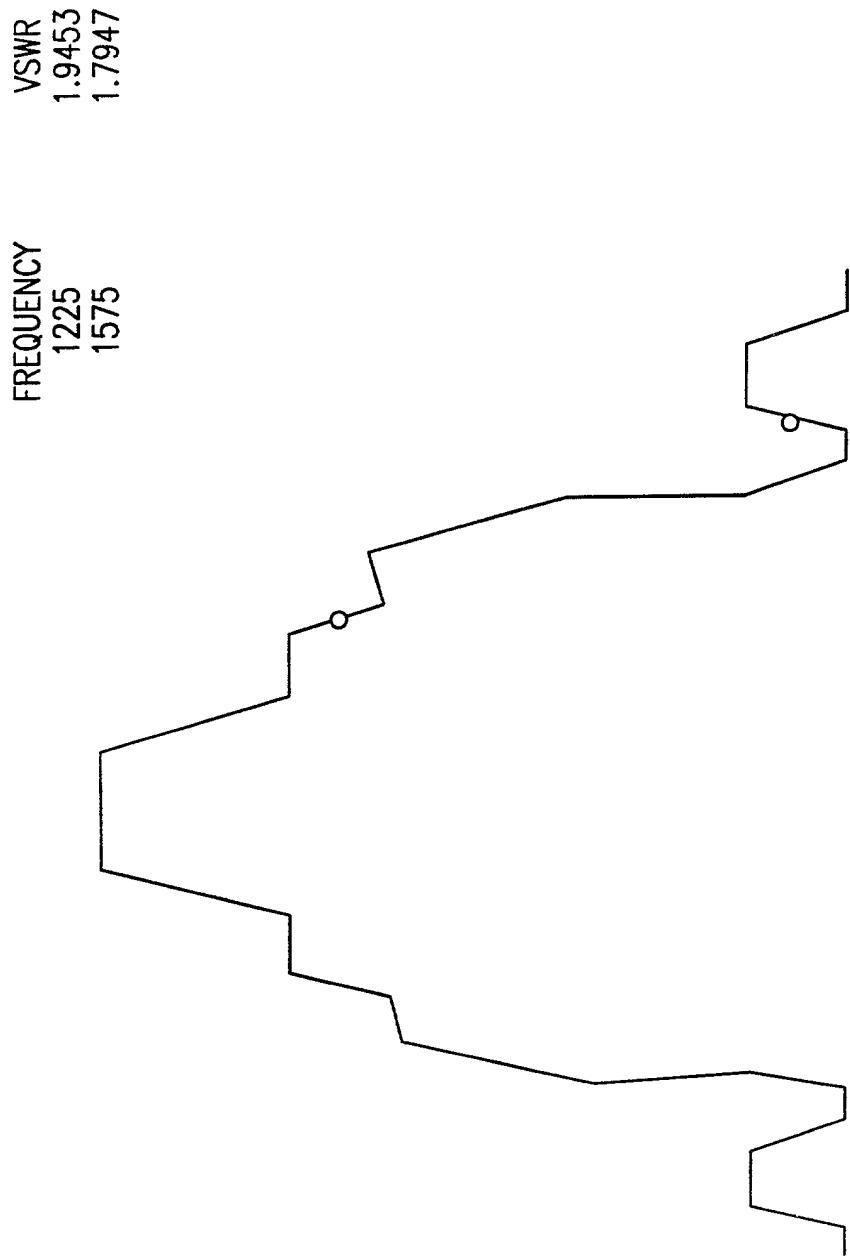


FIG.36

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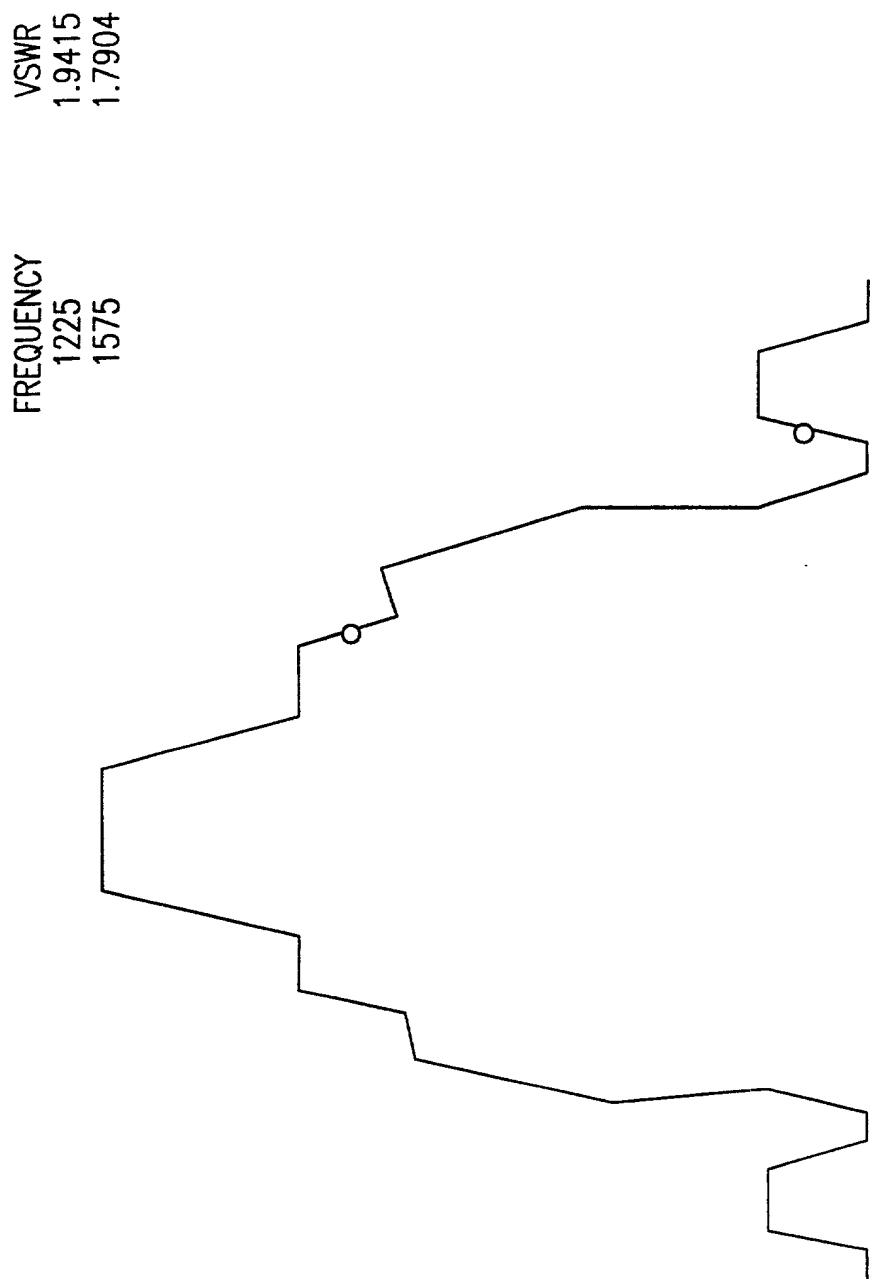


FIG. 37

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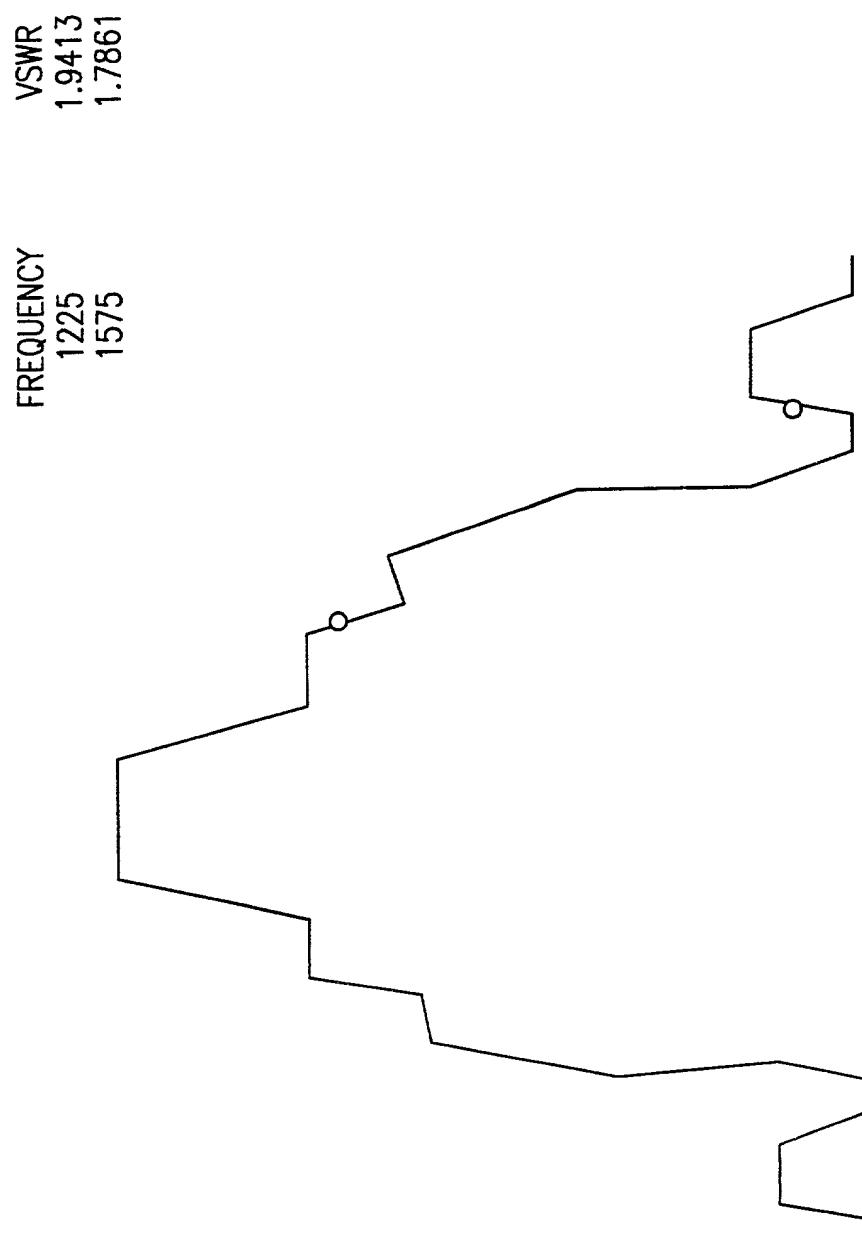


FIG.38

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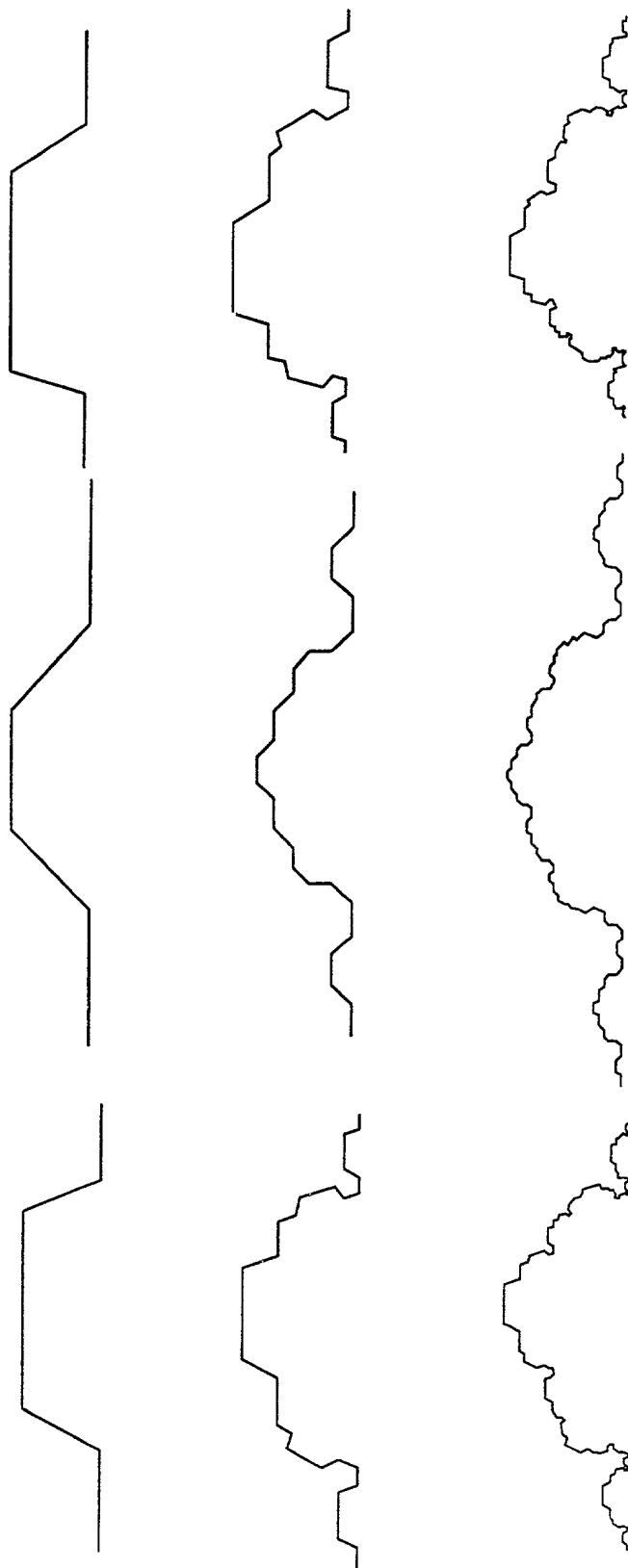


FIG. 39

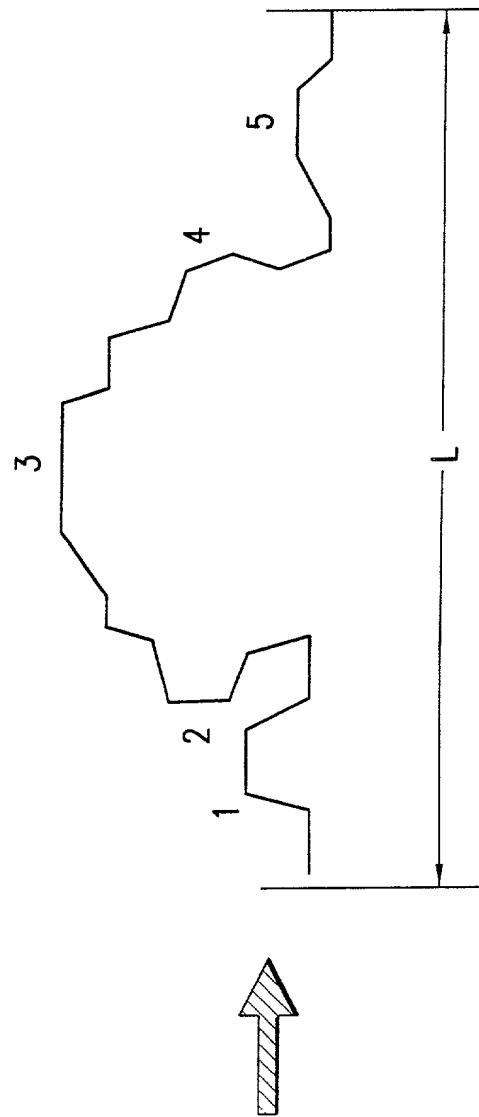
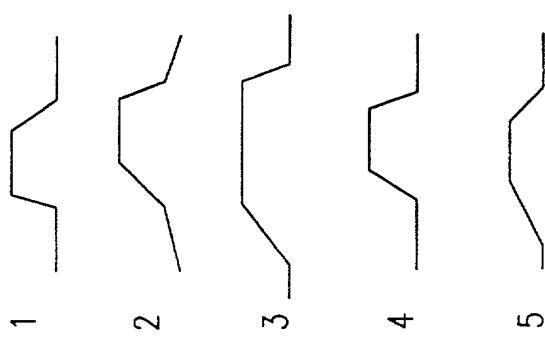


FIG.40



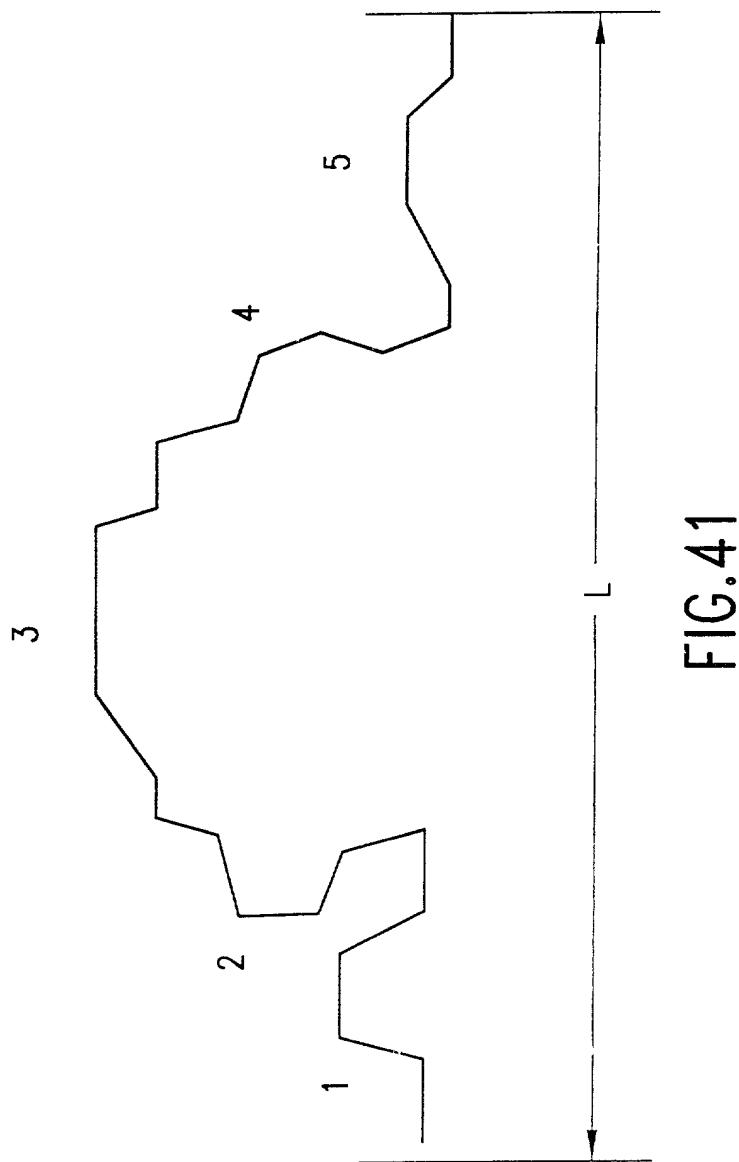
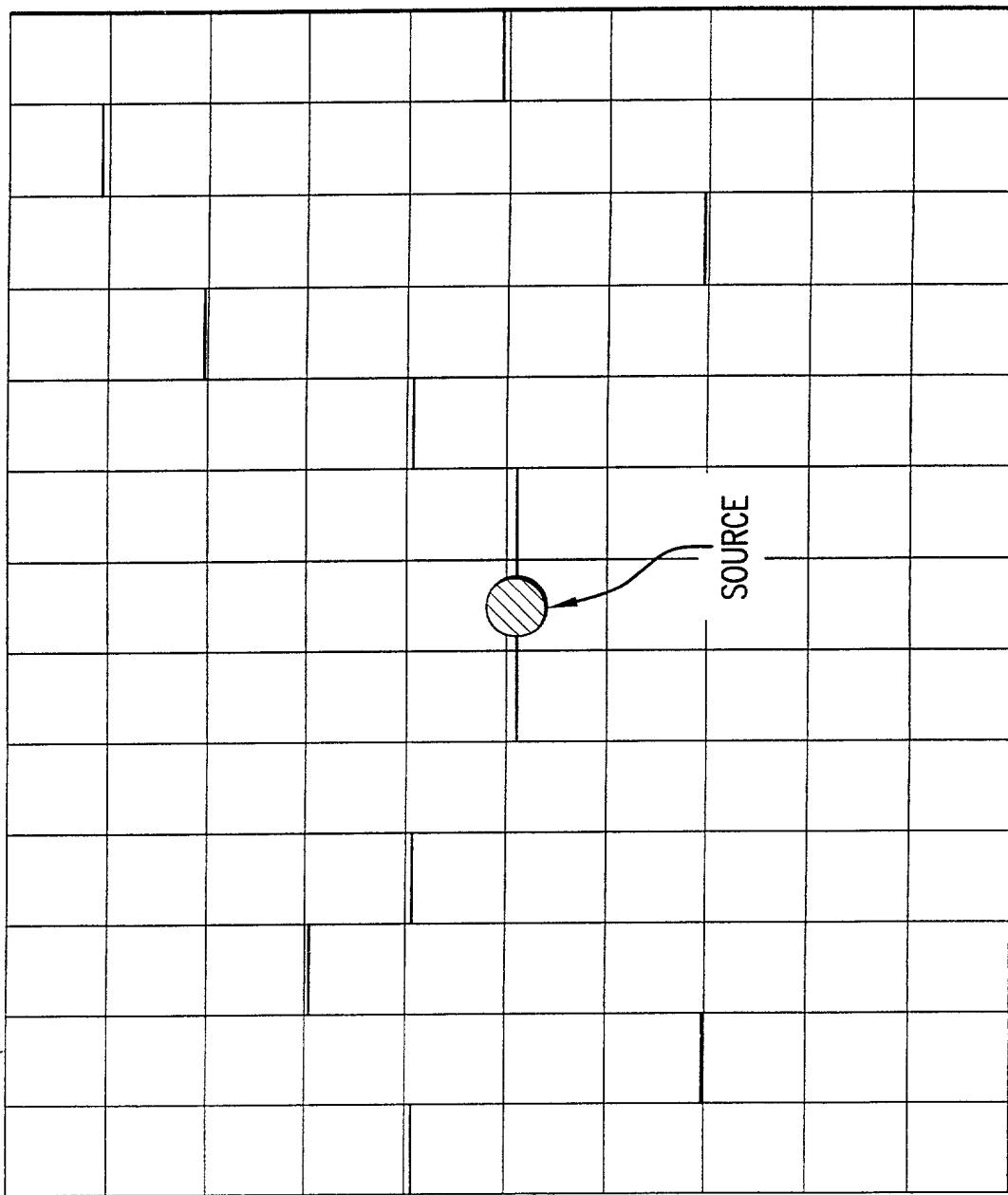


FIG. 41

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FIG. 42



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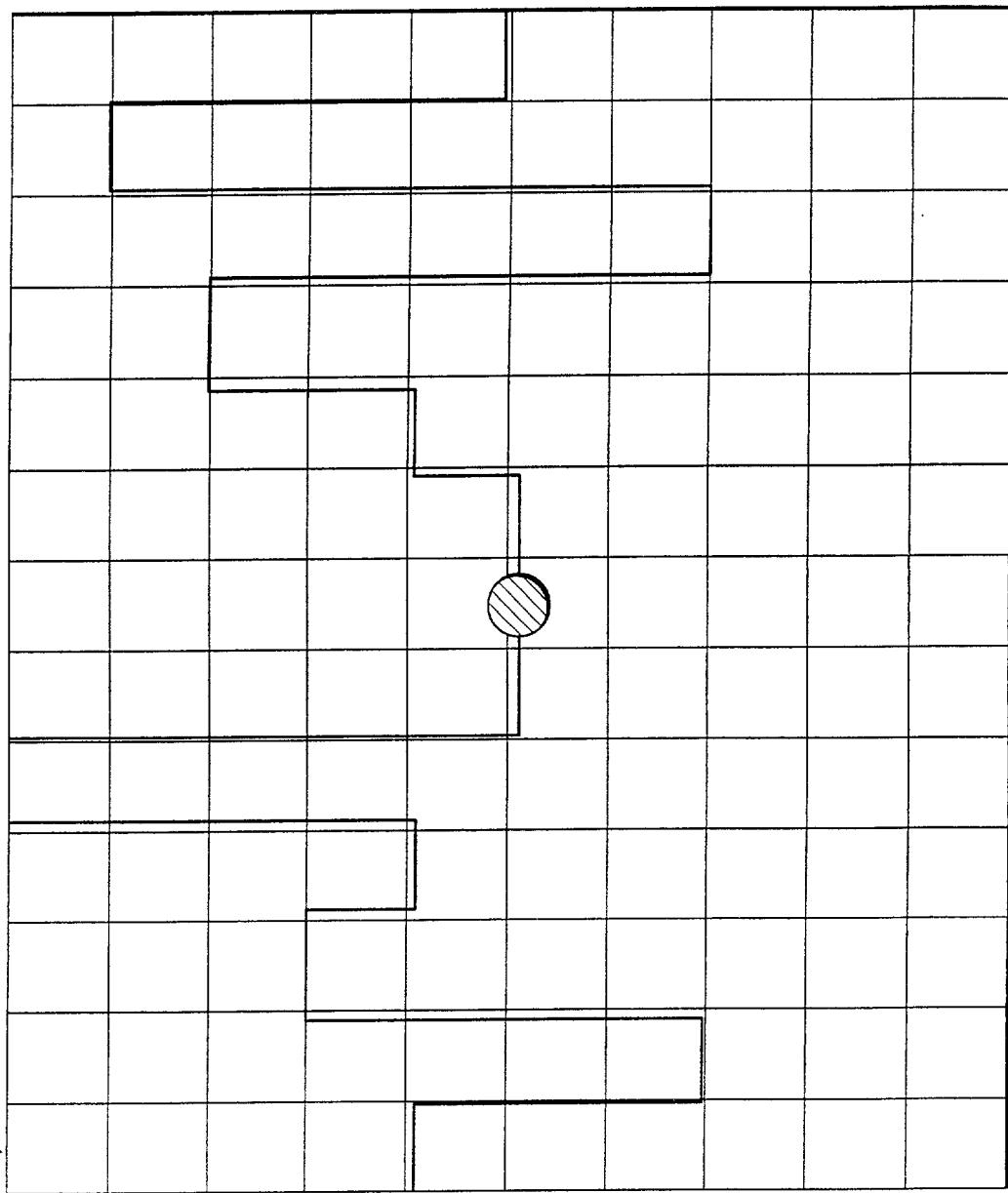
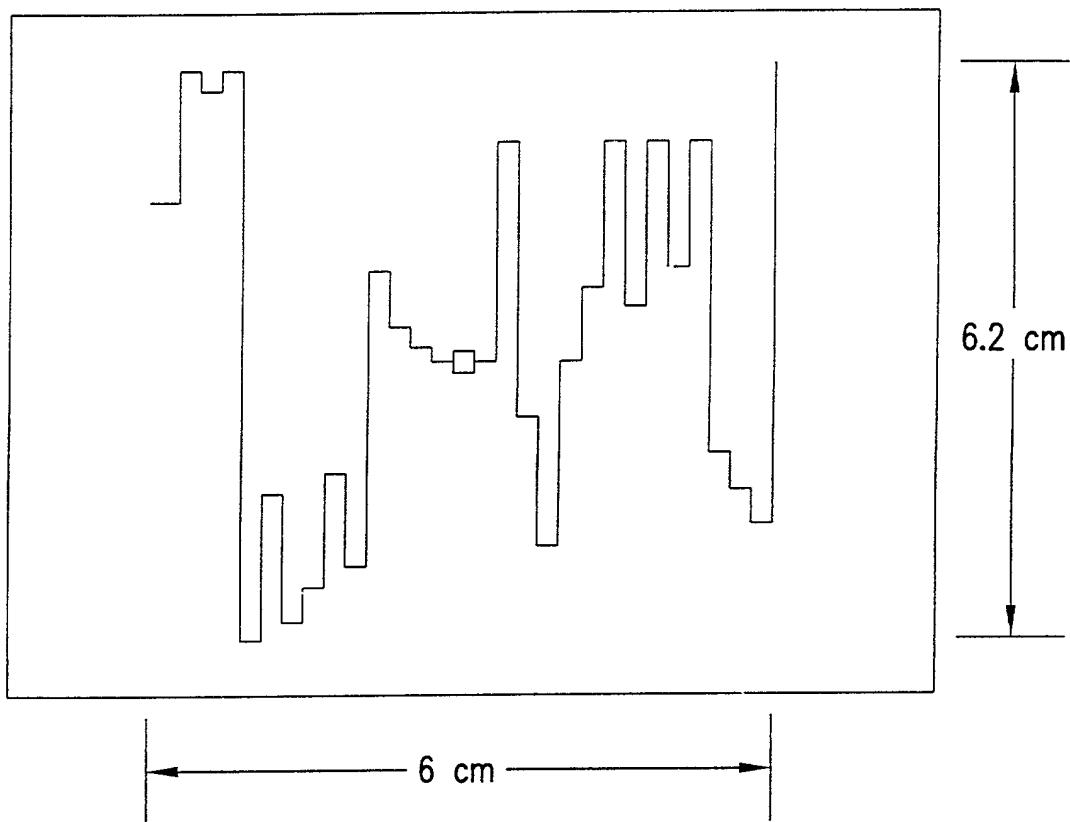


FIG.43



FREQUENCY (MHz)	VSWR	ZIN	GAIN
1225.0	1.579067	(32.47140, -6.125150)	2.030
1575.0	1.262626	(39.63660, -0.9270540)	2.610

FIG. 44

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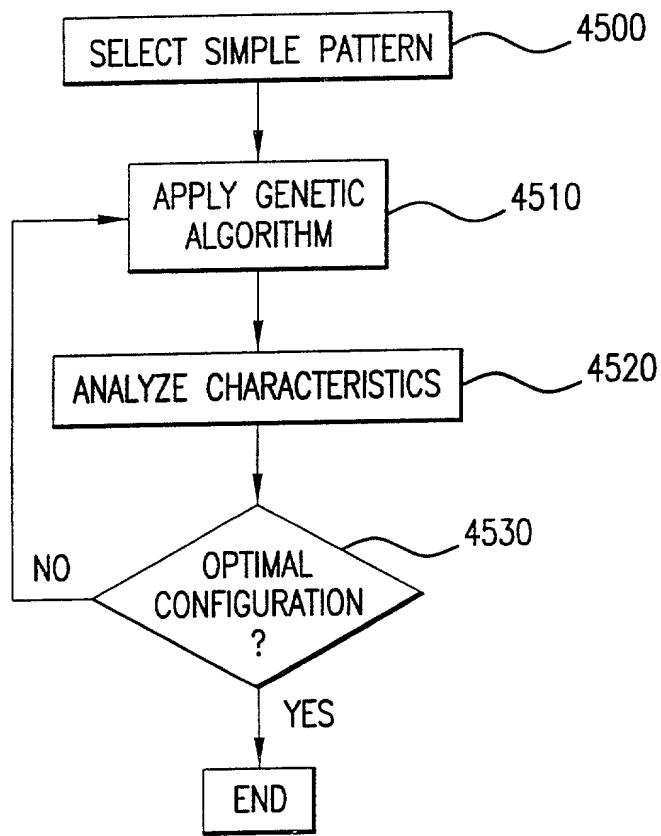


FIG.45

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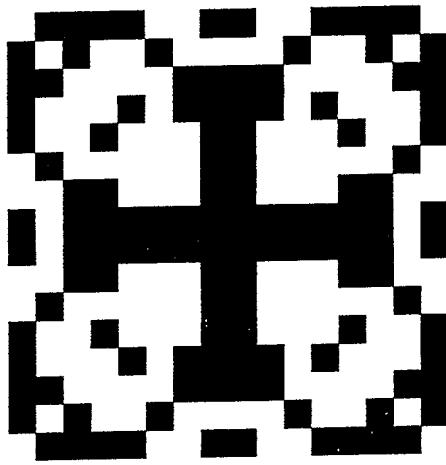


FIG.46

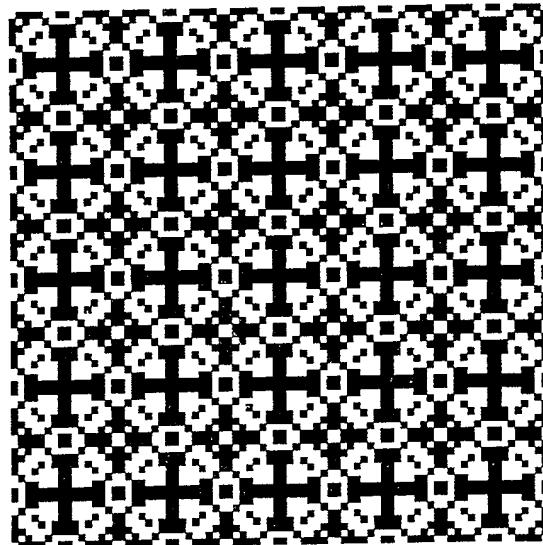


FIG.47